Recombinant human Peroxiredoxin 1/PRDX1 protein

Catalog Number: PRX0801

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-199aa

UniProt No.
Q06830

NCBI Accession No.
NP_002565.1

Alternative Names
Natural killer cell-enhancing factor A, NKEF-A, Proliferation-associated gene protein, PAG, Thioredoxin peroxidase 2, Thioredoxin-dependent peroxide reductase 2, Thioredoxin-dependent peroxiredoxin 1, PAGA, PAGB, TDPX2

PRODUCT SPECIFICATION

Molecular Weight
24 kDa (219aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 20% glycerol

Purity
> 90% by SDS-PAGE

Biological Activity
Specific activity is >2,000pmol/min/ug. Enzymatic activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25C for minute.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
PRDX1 is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. This protein is also known to be important to protect red blood cells against reactive

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oxygen species and in tumor prevention. Recombinant human PRDX1, fused to His-tag at N-terminus, was expressed in E. coli and purified by conventional chromatography techniques.

Amino acid Sequence

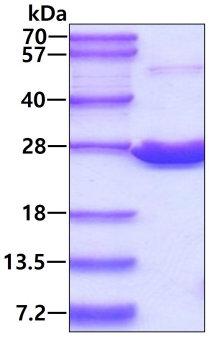
<MGSSHHHHHH SSGLVPRGSH> MSSGNAKIGH PAPNFKATAV MPDGQFKDIS LSDYKGKYVV FFFYPLDFTF VCPTEIIAFS DRAEEFKKLN CQVIGASVDS HFCHLAWVNT PKKQGGLGPM NIPLVSDPKR TIAQDYGVLK ADEGISFRGL FIIDDKGILR QITVNDLPVG RSVDETLRLV QAFQFTDKHG EVCPAGWKPG SDTIKPDVQK SKEYFSKQK

General References

Iraqui I., et al. (2008) Cancer Res. 68(4):1055-63.
Parmigiani RB., et al. (2008) Proc Natl Acad Sci u S A. 105(28):9633-8.
Kim JH., et al. (2008) Clin Cancer Res. 14(8):2326-33.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.